

WHAT IS CLAIMED IS:

1. An organic electroluminescent device including a pair of electrodes including an anode and a cathode, at least one of which is transparent or translucent; and one or more organic compound layers placed between the pair of electrodes,

wherein at least one of the organic compound layers contains a charge transport material that satisfies the following relations:

$$(t_a - t_T)/t_a < 0.5 \dots \text{Expression (1)}$$

$$D/\mu < 20 \dots \text{Expression (2)}$$

wherein, in an electric field of 10 V/ μm , t_T is a transit time of a transient photocurrent waveform; I_T is a current value at time t_T ; I_a is half of the current value I_T ; t_a is a time at the current value I_a on the transient photocurrent waveform; D and μ are respectively a diffusion coefficient and a true mobility obtained from the transient photocurrent waveform; and D/μ is the ratio of D to μ .

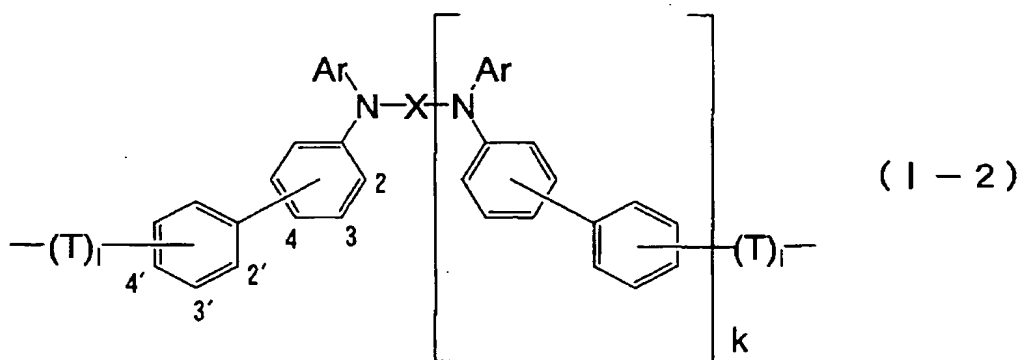
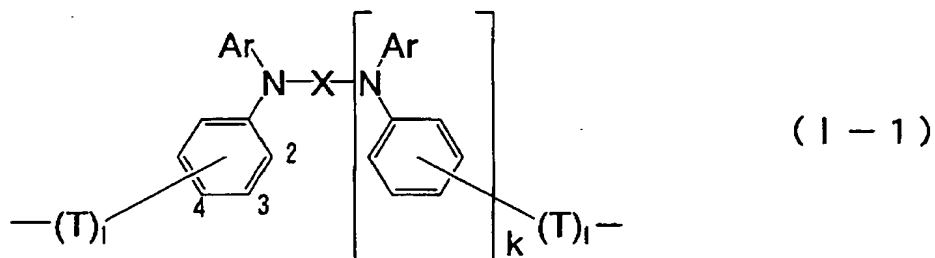
2. An organic electroluminescent device according to claim 1, wherein the charge transport material is a hole transport material.

3. An organic electroluminescent device according to claim 1, wherein the charge transport material is an electron transport material.

4. An organic electroluminescent device according to

claim 1, wherein the charge transport material is a polymer charge transport material.

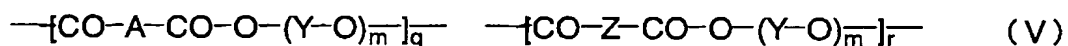
5. An organic electroluminescent device according to claim 4, wherein the polymer charge transport material has a repeating unit that includes a partial structure represented by either one of Formulae (I-1) and (I-2):



wherein Ar represents a substituted or unsubstituted phenyl group, a substituted or unsubstituted monovalent polynuclear aromatic ring group having 2 to 10 aromatic rings, or a substituted or unsubstituted monovalent condensed aromatic ring group having 2 to 10 aromatic rings; X represents a substituted or unsubstituted bivalent aromatic group; k and l each independently represent 0 or 1; and T represents a linear

or branched bivalent hydrocarbon group having 1 to 10 carbon atoms.

6. An organic electroluminescent device according to claim 5, wherein the polymer charge transport material is represented by one selected from the group consisting of Formulae (II), (III), (IV) and (V):



wherein A represents Formula (I-1) or (I-2); B represents -O-(Y'-O)_{m'}- or Z'; Y, Y', Z, and Z' each independently represent a bivalent hydrocarbon group; m and m' each independently represent an integer from 1 to 5; n represents 0 or 1; p represents an integer from 5 to 5000; q represents an integer from 1 to 5000; and r represents an integer from 1 to 3500.